

Work Order ID 151823 -1

151823

Page 1

Tuesday, October 11, 2016 8:25:37 AM

Item ID: D139-799-039

Accept

N9000040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: AW139 Easy Access Engine Oil Drain

Start Date: 10/12/2016 Start Qty: 3.00

3

Cust Item ID:

Required Date: 10/26/2016 Req'd Qty: 3.00

3

Customer:

Reference:

Approvals: Process Plan:

DAS
21
9-89

Date: OCT 11 2016

Tooling:

Date:

Run Start *NR1*

QC:

Date:

SPC (Y/N):

Date:

Stop *NR2*

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

DAS
6
9-89

OCT 27 2016

DAS
21
9-89

10-10-27

100

Document Control

0.00

100

DC

Memo

0.00

Doc.Control -USB or Paperwork

Photocopy bluefile & type labels per PPP D139-799-039
CHG001

DAS
27
9-89

NOV 18 2016

110

Pick Kit

0.00

110

Packaging

Memo

0.00

Packaging

NOV 08 2016

DAS
6
9-89

DAS
28
9-89

120

QC4- 100% Inspect kits for completeness

0.01

120

QC

Memo

0.02

Quality Control

DAS
27
9-89

NOV 18 2016

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		OTHER : ☐							

Work Order ID 151823***151823***

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Tuesday, October 11, 2016 8:25:37 AM

Item ID: D139-799-039

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: AW139 Easy Access Engine Oil Drain

Start Date: 10/12/2016 Start Qty: 3.00

3

Cust Item ID:

Required Date: 10/26/2016 Req'd Qty: 3.00

3

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

130

0.00

130

Packaging

Memo

0.00

Packaging

Identify and pack for shipping as per PPP D139-799-039
Location:FG019*Sold*DAS 27 28
9-89 9-89
NOV 18 2016

140

QC21- Final Inspection - Work Order Release

0.02

140

QC

Memo

0.05

Quality Control

DAS 21
9-89

NOV 27 2016

16-11-22

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval Completed By _____ Lead hand / Supervisor Approval Verification _____ QC / QA Coordinator Approval _____	
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY							
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong	☐
Design	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions	☐
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance	☐
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect	☐
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing	☐
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved	☐
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing	☐
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish	☐
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread	☐
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence	☐
Past Expiry Date	☐	Manufacturing Process	☐	OTHER : _____							
Misidentified	☐	Past Due	☐								

Picklist Print

Tuesday, October 11, 2016 8:25:46 AM

Page 1

Work Order ID: 151823

151823

Parent Item: D139-799-039

D139-799-039

Parent Item Name: AW139 Easy Access Engine Oil Drain

Start Date: 10/12/2016

Required Date: 10/26/2016

Start Qty: 3.00

Required Qty: 3.00

Comments: IPP REV:A 16.10.07 NEW ISSUE DD VERF:JFS

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D5370-1 *D5370-1* Fitting		Manufactured	No				Each	1.0000	2	6			
									**	157824x5		NOV 08 2016	DAS 6 28 9-89-89
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				prelim				1					
					141233			1					
D5373-1 *D5373-1* Oil Drain Line		Manufactured	No				Each	0.0000	2	6			
									**	2x 157825		NOV 21 2016	DAS 6 28 9-89-89
D5373-3 *D5373-3* Oil Drain Line		Manufactured	No				Each	0.0000	2	6			
									**	2x 157826		NOV 21 2016	DAS 6 28 9-89-89
D5383-1 *D5383-1* Tee		Manufactured	No				Each	0.0000	2	6			
									**	1408142		NOV 11 2016	DAS 6 28 9-89-89
D5384-1 *D5384-1* Bracket		Manufactured	No				Each	1.0000	1	3			
									**	153208			DAS 6 28 9-89-89
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				prelim				1					
					141234			1					
D5384-2 *D5384-2* Bracket		Manufactured	No				Each	0.0000	1	3			
									**	151829		NOV 11 2016	DAS 6 28 9-89-89
D5421-041 *D5421-041* Oil Drain Hose Assembly		Manufactured	No				Each	0.0000	2	6			
									**	151910		NOV 18 2016	DAS 6 28 9-89-89

OK See Attach E-mail

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

Picklist Print

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Work Order ID: 151823

151823

Parent Item: D139-799-039

D139-799-039

Parent Item Name: AW139 Easy Access Engine Oil Drain

Start Date: 10/12/2016

Required Date: 10/26/2016

Start Qty: 3.00

Required Qty: 3.00

NAS509-7C Purchased No Each 0.0000

NAS509-7C

** 2 6
135884

NOV 08 2016

Nut AS3208-06 Purchased No Each 0.0000

AS3208-06

** 2 6
135884

NOV 08 2016

Packing MS27039C1-12 Purchased No Each 0.0000

MS27039C1-12

** 4 12
135884

NOV 08 2016

Screw

DAS
28
9-89

DAS
6
9-89

15386-1 qty 2

Batch: 140870

~~15521-1 qty 2 Batch: 157831~~

Tuesday, October 11, 2016 8:25:46 AM

Shop Packet Print

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval 	
Description Work Order Deviation				Disposition					
								Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	

Root Cause			FAULT CATEGORY		
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____			
Misidentified ☐	Past Due ☐				

Qty -035	Qty -036	Qty -037	Qty -038	Part Number	Description
X				D139-799-035	HEAVY DUTY REPLACEMENT CABIN STEP KIT LH
	X			D139-799-036	HEAVY DUTY REPLACEMENT CABIN STEP KIT RH
		X		D139-799-037	LIGHT WEIGHT REPLACEMENT CABIN STEP KIT LH
			X	D139-799-038	LIGHT WEIGHT REPLACEMENT CABIN STEP KIT RH
1				D5235-041	LH STEP ASSEMBLY
	1			D5235-042	RH STEP ASSEMBLY
		1		D5235-043	LH STEP ASSEMBLY
			1	D5235-044	RH STEP ASSEMBLY
1	1	1	1	*D5271-1	FORWARD AIRCRAFT FITTING
1		1		*D5271-3	LH AFT FITTING
	1		1	*D5271-4	RH AFT FITTING
1	1	1	1	*D5272-1	FORWARD TUBE
1	1	1	1	*D5272-3	AFT TUBE
2	2			*D5273-041	END FITTING ASSEMBLY
		2	2	*D5273-043	END FITTING ASSEMBLY
1	1			*D5274-1	STEP EXTRUSION
		1	1	*D5274-3	STEP EXTRUSION
14	14	14	14	*D5291-041	RADIUS BLOCK ASSEMBLY
12	12	10	10	*MS24694-S50	SCREW
14	14	14	14	*MS24694-S98	SCREW
28	28	28	28	*MS20426AD4-6	RIVET

*Part of D5235-041/-042/-043/-044 assembly, above.

Qty -039	Part Number	Description
X	D139-799-039	ENGINE OIL DRAIN KIT
2	D5370-1	FITTING
2	D5373-1	OIL DRAIN LINE
2	D5373-3	OIL DRAIN LINE
2	D5383-1	TEE FITTING
1	D5384-1	BRACKET
1	D5384-2	BRACKET
2	D5386-1	VALVE
2	D5421-1041	DRAIN LINES
2	NAS509-7C	NUT
2	AS3208-06	PACKING
4	MS27039C1-12	SCREW

Thursday, October 27, 2016 7:40:57 AM

Page 1

Quality Control

David Duval

From: Colin Corbett
Sent: November-21-16 3:26 PM
To: David Duval; Harvey Siemens
Subject: RE: D139-799-039 kit

Hi David,

Yes, you're right. there is an error there. We decided not to revise the IIN just for that, so I created a DSI (DSI 9763).

The DSI is under review with David Shepherd at the moment, but it is ok to include the D5421-041 Drain line in the kit, and NOT just the D5421-1

Let me know if you have any more questions!

Cheers,

Colin Corbett, P. Eng
Design Engineer

DART AEROSPACE
T 1 403 717-0328 > 428



From: David Duval
Sent: 21-Nov-16 13:06
To: Colin Corbett <CCorbett@dartaero.com>; Harvey Siemens <hsiemens@dartaero.com>
Subject: D139-799-039 kit

Hi,
Could there be a error in the part list of D139-799-039.
Should D5421-1 be D5421-041 Drain line?

DAVID DUVAL
Production Engineering Coordinator

DART AEROSPACE
T 1 613 632-5200 > 234
F 1 613 632-5246
1 800 556- 4166
www.dartaerospace.com

